

# METHOD FOR PATTERNING HfO<sub>2</sub>-CONTAINING DIELECTRIC

## Abstract

A wafer has a trench, a STI layer formed in the trench, an HfO<sub>2</sub>-containing gate dielectric covering the wafer and the STI layer, a gate electrode formed on the HfO<sub>2</sub>-containing gate dielectric, and at least a spacer formed beside the gate electrode. The wafer is preheated and a bromine-rich gas plasma is provided to remove portions of the HfO<sub>2</sub>-containing gate dielectric.